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An empirical examination of metal detecting

Per capita numbers of metal detectorists in a British-German comparison

Raimund Karl and Katharina Möller¹

One of the key issues in the debate about how the archaeological profession should deal with the ‘problem’ of non-professional metal detecting is whether a restrictive or liberal approach should be taken towards its regulation. Arguments frequently can get quite heated, particularly on blogs, where self-appointed guardians of heritage and defenders of ‘the hobby’ mainly seem to trade insults rather than discussing data to determine which approach would seem more sensible.

Testing the hypothesis of the deterrent effect

In this paper, we present and examine some data which allows to empirically assess the key prognosis underlying any argument for a restrictive (legislative) approach to metal detecting. This argument can be summarised as:

Anything short of prohibiting metal detecting ‘advertises’ it as a normal and socially as well as archaeologically acceptable ‘hobby’. Thus, members of the public are encouraged to take up this activity by any liberal approach. Adopting one thus, necessarily, cause a rise in the total numbers of metal detectorists. This, naturally, also increases the total damage done by them. This leaves only restrictive approaches as archaeologically responsible solutions to ‘the metal detecting problem’ because of their deterrent effect. A maximally restrictive approach deters all and thus ensures that the archaeology will be preserved in situ.²

From this, an empirically testable prognosis can be created: assuming all else being equal, countries which make metal detecting effectively illegal must have considerably lower per capita numbers of metal detectorists than countries which do not restrict metal detecting much, if at all. After all, prohibiting metal detecting aims at preventing this activity from occurring: a legal probation clearly tells citizens that they should not engage in this activity as a ‘hobby’. Thus, for a prohibitive regime to be successful, it must repress overall uptake of the activity amongst its population; especially compared to liberal regimes which even seem to ‘advertise’ it. ‘Advertising’ an activity, after all, aims at increasing the uptake of that activity amongst the population.

To test whether restrictive regulation creates that deterrent effect, one would, in theory, simply need to establish a reliable per capita number of metal detectorists in counties with differently restrictive legal regimes and compare those figures.

¹ This is the English version of a paper we originally published in German in 2016 (Karl & Möller 2016). While the English version was written at the time, we never submitted it to a publisher. Since the German version has since been picked up and its methodology seriously misused in a widely reported paper by Samuel A. Hardy (2017), we have decided to make this version available via Archäologische Denkmalpflege after all.

² Although the last part of the argument seems convincing at first glance, it is actually based on a serious logical flaw. For the issues with the idea that not extracting a find ex situ necessarily leads to its preservation see ‘[Against retention in situ](#)’.

Estimates of and ‘official’ metal detectorist figures

In practice, it is not quite as simple as that. After all, in many countries, particularly such with a restrictive approach to regulating it, metal detecting is mostly a clandestine activity. Thus, there are no reliable figures of how many metal detectorists there are, but at best rough estimates, which can and do vary widely.

For this study, we have chosen as countries to compare the quite restrictive German-speaking countries Austria and Germany on the one hand, and the very liberal United Kingdom on the other, mostly because as an Austrian and a German citizen, who have been living in the UK for considerable time, we have a good understanding and extensive experience of all three. Yet for none of these three countries, more than very rough estimates exist regarding the total number of metal detectorists in each of them. Thomas (2011, 57) for instance, has estimated that in 2006, there were about 12,000-14,000 active metal detectorists in England and Wales; while one of the authors of this paper estimated – incidentally, as we now think, quite falsely – that in 2010, c. 2,000-3,000 metal detectorists were active in Austria (Karl 2011, 120). Where Germany is concerned, there are not even proper estimates, with figures between c. 10,000 and 80,000 bandied about by various people, mainly on the internet.

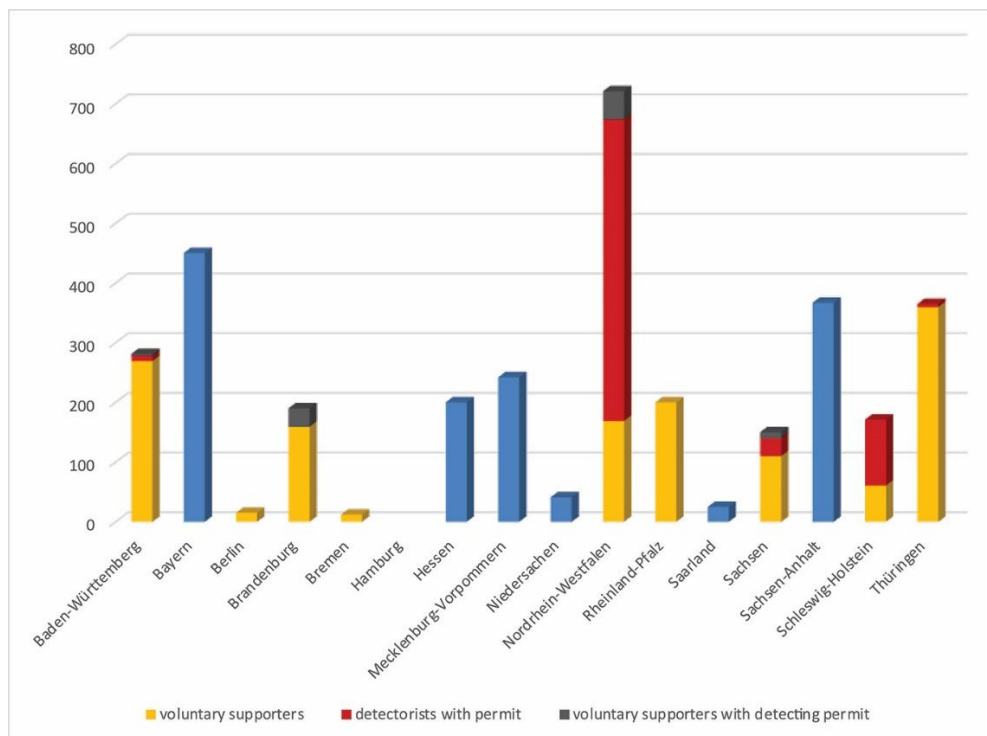


Figure 1: Estimated numbers of archaeological volunteers and metal detectorists with a metal detecting permit in German states (Länder), based partly on responses to our inquiries to the state heritage agencies in March 2015 and partly on data collected in 2010 by Schmuck (2012, 24; shown in blue) from the same sources.

Where Germany is concerned, the only ‘official’ figure is that of archaeological volunteers and ‘legal’ metal detectorists with a metal detecting permit (as issued by some German state heritage agencies), which comes to c. 3,000 (fig. 1). Even that figure, however, is no more than an estimate, since getting reliable numbers of volunteers and ‘permitted’ metal detectorists from some of the *Landesämter* was impossible. And that is only the definitely ‘legal’ part of the metal detecting scene, not the – probably much larger – ‘illicit’ or ‘illegal’ part of it.

For the UK, the only reasonably 'sound' figure is the number of registered users on the [Portable Antiquities Scheme](#) (PAS) website, which in 2013 was 7,538 people. Of those, 815 had full research access privileges and thus, presumably, were mostly professional archaeologists, with 6,723 users remaining who, presumably, will predominantly be metal detectorists (PAS 2013, 4). But again, that figure captures only a segment of the metal detecting community, and a very different one than the German figures for archaeological volunteers and metal detectorists with permits.

For Austria, there are no comparable figures at all: while the Austrian National Heritage Agency (BDA) annually publishes a gazetteer of all finds and excavation reports it received in the respective year, the so-called *Fundberichte aus Österreich*, hardly any of the e.g. 31 members of the public who reported any finds at all in the year 2008 (Karl 2011, 117) were metal detectorists, if any; and there are no metal detectorists with a metal detecting permit in Austria at all.

An alternative method of comparison

With estimates for total numbers highly unreliable, and 'official' figures only capturing an unknown segment of the total metal detecting community in each country, another means had to be found to establish reasonably reliable per capita figures for metal detectorists in the compared countries. These means, we only found once we abandoned any attempt to find and compare any ('reliable' or not) estimates of the total numbers of metal detectorists in each of the compared countries. Rather, we decided to concentrate on actual figures provided – entirely inadvertently – by the metal detecting communities in the respective countries themselves; through their use of modern social / telecommunication media on the internet, in metal detecting discussion boards.

Virtually all boards available – not just for metal detecting, but any topic – only give full reading (and writing) privileges to users who register; with 'guest users' usually having restricted reading and writing privileges only, if any. Thus, most people who want to benefit from the information available on such boards, or might wish to contribute themselves to debates, do register.

The number of registered users is usually displayed somewhere on any such board, most often at the very top or bottom of its front page. Occasionally, one needs to register oneself as a user to gain access to the 'members section' to be able to see this number. But since registration is mostly an automatic process, with access granted to anyone who is a real human being rather than just an automated internet bot, getting membership figures even for boards which hide them is quite easy. Thus, not only is everyone who signs up to such a board counted, but that count is also easily observable (if only by signing up, thus increasing the membership number of the respective forum by one).

Of course, registered membership in such boards is entirely voluntary; i.e. only those sign up who want to at least read, or participate in, the discussions and benefit from any other information available only to registered users (of which there often is quite a lot). Yet, since such boards are created by and for special interest groups, who use them as expert systems to exchange information, discuss issues relevant to their interests, they usually are very popular in the constituency interested in the general 'theme' or 'topic' the board serves. Metal detecting boards provide those interested in it with easy access to all kinds of 'expertise'; be it technical, legal, or subject expertise regarding the historical and often also financial value of their finds. They also can and do provide interested 'hobbyists' with social contacts, with fun, the opportunity to 'talk' to like-minded people who may be rather far away physically, and even with empathy, understanding, and even some degree of counselling, when facing a problem (whether one related to their 'hobby' or, indeed, any other). Last but not least, they also provide opportunities to show off in front of a group of peers, be it (for people who have been at it for a long time) with expertise or only dumb luck (if a 'newbie' who at his first attempt stumbled across an exciting and valuable 'treasure'). Thus, while certainly not everyone who

is interested in metal detecting signs up as a member to such a board (or indeed several boards), many who are do, since they are a valuable resource for them.

Thus, we would argue – and in the following discussion assume – that the particular nature and purpose of such boards leads to their membership figures being, at least roughly, representative of the general interest in this topic in any particular country (or at least language area), despite registering being entirely voluntary. We would also argue that this is especially the case for boards dealing with interests which are locally, regionally, or at least nationally specific; as metal detecting tends to be.

After all, metal detecting is a hobby which is exercised mostly locally or regionally: metal detectorists like to engage in their hobby after work or on weekends and spend as much time as possible searching and finding. Thus, they rarely drive excessive distances, or even fly to foreign shores, to engage in it. It is also subject to national or indeed regional laws, and thus ‘keeping it local’ ensures that the ‘hobbyist’ does not have to know many different ones, but only one (or, in Germany, at most a few). Thus, we also would argue that metal detectorists are exceedingly more likely to sign up to a board in the country they live in, rather than in one they only occasionally go to on holidays.

We would also argue – and in the following discussion assume – that in countries with similar socio-economic conditions, similar rates of internet access, who have similar (e.g. modern, western, industrialised, democratic) societies which similarly value culture and history (e.g. have similar kinds of history lessons in school, similarly accessible museums, history programmes on TV and other media, etc.), roughly similar percentages of the respective national metal detecting community will sign up to relevant boards. Thus, we argue that in countries where ‘all else being equal’ can be assumed, the number of members of ‘national’ metal detecting boards is roughly representative of the per capita number of all metal detectorist active in each; since roughly the same percentage of all metal detectorists in each will likely join one or several ‘national’ detecting boards.

From this, it follows that if we compare such countries, we do not need to estimate the numbers of metal detectorists in each to be able to determine in which there are more metal detectorists per capita than the other(s). Rather, we can directly compare per capita numbers of users of ‘national’ boards and arrive at a sound first approximation as to which country has the highest, and which the lowest, per capita number of metal detectorists in its population.

Austria, Germany, and the United Kingdom

Thus, we can test the hypothesis that countries with a more liberal approach to metal detecting must necessarily have a higher per capita-number of metal detectorists than those who take a more restrictive approach directly against empirical data, rather than against unreliable estimates.

As the countries to be compared, we have chosen the three countries we know and understand best, and where we have the best access to relevant data: Austria, Germany, and the UK. That one can reasonably assume that Austria, Germany, and the United Kingdom are comparable in the way just described, in our opinion, is a given. Not only does this match our own experiences of (between the two of us) living for extensive periods in all of them, it is also plainly evident from all relevant indicators:

E.g., according to [World Bank data for 2013](#), Austria ranks 14th in the world for per capita GDP (\$ 45,493), Germany 16th (\$ 44,496), and the UK 24th (\$ 38,453), all well within the ‘very comfortable’ range of that particular league table. Pretty much the same goes for [Internet penetration of the](#)

[population](#), which stood, in 2015, at 87% for the UK, at 84% for Germany, and at 81% for Austria. Pretty much all other such general indicators are roughly equal between all these three countries, too. And that all of them have a proud (and at times 'imperial') history and culture that each of them values goes as much without saying as that this history and culture is similarly used by each. Thus, we would argue that, for the purpose of our comparison, it is exceedingly likely that the number of members of 'national' metal detecting boards is roughly the same percentage of the total size of that constituency in all of these countries.

Metal detecting in Austria, Germany and the UK: the rules

Where those three countries differ significantly is in their approach towards metal detecting by members of the public. The situation here is somewhat complicated by the fact that legislation differs at least somewhat between the different German states, and also across the UK. Still, the approach to legislation, at least by and large, differs only relatively little between all the German states, and the constituent parts of the UK respectively; while considerable differences exist between what could be called the 'Germanophone' (i.e. including the Austrian) and the 'Anglophone' approach.

Still, the following summary of the situation in each country should be treated as a generalising simplification of what, in fact, is much more complicated. However, in the context of this article, we cannot discuss all the differences in details between metal detecting rules and legislation in the different states of Germany and the different nations of the UK, so a simplified summary assessment of how restrictive a country is where archaeological metal detecting is concerned is the only option available to us for testing the above hypothesis.

Austria

Austria is the only of the countries discussed with a uniform national heritage legislation. Its approach to metal detecting is quite restrictive.

On scheduled ancient monuments, all metal detecting, for whatever reason, is prohibited according to § 11 (8) Austrian Monuments Protection Law (DMSG) without a permit by the BDA. Also, according to the BDA's current interpretation of § 11 (1) DMSG, any search for archaeological objects under the surface of the earth or water requires an individual permission by the BDA. Such permits, by law, can only be issued to archaeology graduates, and only for specific projects. Thus, members of the public who have no archaeology degree can only lawfully metal detect for surface finds (which kind of defeats the point of using a metal detector).

However, metal detecting for any **other** purpose than discovery of archaeology is generally permitted except on scheduled monuments. Thus, it is sometimes difficult to convict metal detectorists even if they are caught red-handed while digging up archaeology (although normally, prosecutions in such cases are successful).

All finds, whether found legally or illegally, must be reported to the BDA within one working day according to § 8 (1) DMSG. However, finds discovered legally (that is, by chance or – in case of metal detected objects – if they were already on the surface when detected, with the latter of course being almost impossible to prove), if reported properly, become equally shared property of finder and landowner according to § 399 Austrian Common Law (ABGB). Only if the find was made illegally or not properly reported to the authorities, the 50% ownership share of the finder (and if he knowingly concealed the find, also that of the landowner) falls to the one who reported the find instead, or in the absence of such a reporter, to the state.

Thus, in Austria, metal detecting for buried archaeology is completely prohibited except for archaeology graduates with a specific permit, metal detecting for surface finds is entirely legal except on scheduled monuments, and 'legal' finders (and landowners) are usually rewarded with (shared) ownership of any finds made, regardless of whether these are of national importance or not. While already quite far on the restrictive side, particularly the 'reward' by shared find ownership of legal finders is a liberal tendency; so Austria can be considered to be 'on the middle ground' for the purpose of hypothesis-testing in this paper.

Germany

Germany approaches metal detecting by the public very restrictively, even more so than Austria in most regards.

In all German states (except for Bavaria, which is somewhat less restrictive), metal detecting for archaeology is prohibited without a permit by the respective state heritage agency (LfD). While technically, the 16 German state monument protection laws do all allow such permits to be granted to anyone, some German LfDs do not issue such permits to members of the public who have not graduated in archaeology (as a matter of principle), while virtually all others make it a requirement to take a course on responsible metal detecting, often run only very rarely and for limited numbers of participants, thus keeping the numbers of 'legal' metal detectorists quite low (cf. fig. 1). In some German states, there are extensive waiting lists for such courses, with up to 4 years of expected waiting times in some reported cases for metal detectorists who want to qualify for a permit.

All archaeological finds in Germany must compulsorily be reported to the local LfD by law. Where ownership of finds is concerned, all German states (except Bavaria, which has a very similar rule as neighbouring Austria) claim ownership of (most) archaeological finds under a treasure trove system (though the details of what falls under treasure trove are defined differently in each state); though several in practice only claim 'important' finds as treasure while returning many to their finders. While some states offer 'legal' finders a modest finder's fee (normally of no more than 3-5% of the find's real market value), some don't compensate finders much, if at all.

Thus, Germany follows (on average) the most restrictive approach to metal detecting by members of the public of the three countries compared here: it makes metal detecting almost completely illegal (except for a select few permitted metal detectorists in some states), and claims (except for Bavaria) ownership of many, and particularly of valuable, finds, in some cases even without offering any financial compensation to 'legal' finders, not even a proper finder's fee.

United Kingdom

The UK approaches metal detecting by the public quite liberally (except for Northern Ireland, see NIEA 2011). In most of the UK, metal detecting is generally permitted except on scheduled ancient monuments.

With the exception of Scotland, where reporting of all portable antiquities is compulsory (see Historic Scotland n.d.), only finds of 'treasure' (under the Treasure Act 1996) must compulsorily be reported to the authorities, while reporting of all other portable antiquities is voluntary. England and Wales run the [PAS](#) for the purpose of collecting such voluntary reports. If a find has been properly reported and is claimed by the state as treasure, the finder (in Scotland) and landowner are usually financially compensated with a reward up to the real market value of the find. Otherwise, the find is technically owned by the landowner, though metal detectorists usually come to a different agreement with landowners and in practice can keep most of their finds.

Thus, in somewhat simplified terms, in (most of) the UK, anyone can metal detect for archaeological finds except on scheduled monuments, can (oftentimes) keep (most or) all of his 'ordinary' finds, and if an 'extraordinary' find is claimed as 'treasure' by the state, is compensated handsomely for finding and turning it in. Short of 'free for all, finder's keepers', this is as liberal as it gets.

Restrictivity ranking

For testing the hypothesis of the deterrent effect of restrictive regulation, we thus have a relatively clear ranking of the three countries compared in his study: Germany is – on average – the most restrictive, Austria is still quite restrictive, but not quite as much as Germany, while the UK – again on average – is clearly much more liberal than either Austria or Germany. Thus, if the hypothesis that a restrictive approach to metal detecting reduces the number of metal detectorists and thus prevents damage to archaeology were correct, Germany should have fewer metal detectorists per capita than Austria, and both should have considerably fewer metal detectorists per capita than the UK. Consequently, metal detecting boards in Germany should have fewer members per capita than their equivalents in Austria, and boards in both Austria and Germany should have considerably fewer members than their equivalents in the UK.

Metal detecting in Austria, Germany and the UK: the data

To put the hypothesis to the test, we recorded the membership figures of metal detecting boards in Austria, Germany and the UK on 2/3/2015.

To do so, we first searched for and identified all relevant boards by means of a normal Google search and by following up on hyperlinks collected on community-internal link pages.

Our Google searches were based on a primary search term in each of the relevant languages – 'metal detecting' in English and 'Sondengänger' in German – for which the first 100 hundred hits were examined, and a number of secondary search terms – like 'metal detector', 'treasure' in English and 'Metallsucher' and 'Schatzsucher' in German – for which the first 50 hits each were examined. Much of this would probably have been unnecessary, since the first 30 to 40 hits for the primary search term in each language already turned up almost all of the boards that we found, with the largest ones ranking the highest. All searches with secondary terms only returned duplicate hits, if partly in slightly different order. Also, all boards referenced on community-internal link collections had also all been turned up by our primary term searches.

While this does not guarantee that we were able to identify all relevant boards which exist in all these countries, we are as sure as can be that we found all with larger than negligible membership figures. This is particularly so since all with sizeable memberships turned up within the first 20 hits of all searches, regardless of which search term was used, and would of course also feature on community-internal link collections. With such multiple redundancies, it is unlikely that we missed any sizeable ones.

It must be noted, though, that we consciously excluded Germanophone Switzerland and the Republic of Ireland from our survey, despite coming across the odd board for these countries and despite some boards in the countries we compare having sections on them, implying a certain amount of border crossing (in both directions). However, considering these two alongside the other three countries would have further complicated issues; particularly since in Switzerland, besides general treasure trove for archaeological finds, such matters are decided on a cantonal level; and thus we decided to exclude them. Given that their respective populations make up c. 6-7% of the total population of their

neighbouring countries with the same primary language, excluding both seemed sensible to remove similar levels of potential error from our considerations.

United Kingdom

For the UK, we were able to identify 21 metal detecting boards with our search terms. All of them displayed their number of registered members on their front page. Table 1 provides a list of these fora in descending order of membership size, with their URL given in the second column, the number of registered members in the third and the date and time their membership number was recorded in the fourth column.

Forum	Forums-Webadresse	Mitgliederzahl	abgerufen
Metal Detecting Forum	http://www.metaldetectingforum.co.uk/	7331	02/03/2015, 11:15 Uhr
UK Detector Net	http://www.forumukdetectornet.co.uk/phpBB3/portal.php	7192	02/03/2015, 11:11 Uhr
Detectorist	http://www.detectorist.co.uk/phpBB2/index.php	3702	02/03/2015, 12:45 Uhr
DetectingWales	http://www.detectingwales.com/index.php?action=forum	2898	02/03/2015, 12:52 Uhr
British Metal Detecting Forum	http://www.britishmetaldetecting.co.uk/	2434	02/03/2015, 11:32 Uhr
DetectingScotland	http://www.detectingscotland.com/index.php?PHPSESSID=t04plgvamhp2k9vesjtqv3h5&action=forum	1498	02/03/2015, 11:34 Uhr
Central Searchers Club	http://www.centalsearchers.org.uk/forum/portal.php	1059	02/03/2015, 12:17 Uhr
Gary's Detecting	http://www.garysdetecting.co.uk/forum/index.php	808	02/03/2015, 12:43 Uhr
Scottish Detecting Discussion Forum	http://scottishdetecting.co.uk/forum/index.php	551	02/03/2015, 13:00 Uhr
Midland Metal Detecting Club	http://www.midlandmdc.co.uk/forum/	220	02/03/2015, 11:22 Uhr
Colchester Treasure hunting & Metal Detecting	http://www.colchestertreasurehunting.co.uk/detecting/forum.php?s=e4d8d6d6d4d9f5aafef83a0ec5114eb	141	02/03/2015, 11:29 Uhr
Gwent Metal Detecting Club	http://www.gwentdetecting.co.uk/index.php?action=forum	129	02/03/2015, 12:59 Uhr
Metal Detecting UK	http://www.detecting.org.uk/forum/	128	02/03/2015, 12:32 Uhr
Leicestershire Metal Detecting Society	http://www.leicestershiremetaldetectingsociety.com/members-forum.html#/	89	02/03/2015, 12:30 Uhr
Weymouth and Portland Metal Detecting Club	http://wpmdc.getforum.org/	76	02/03/2015, 12:01 Uhr
South Lancashire and Cheshire Metal Detecting Club	http://www.slcmetaldetectingclub.co.uk/forum/	74	02/03/2015, 11:50 Uhr
West Lancs Metal Detecting Club	http://www.eazy1.com/forum/	50	02/03/2015, 13:10 Uhr
Pembrokeshire Prospectors Forum	http://www.pembropspectors.co.uk/cgi-bin/yabb2/YaBB.pl	47	02/03/2015, 12:27 Uhr
Detecting Shropshire	http://www.detectingshropshire.com/	44	02/03/2015, 13:03 Uhr
Wyvern Historical and Detecting Society	http://www.wyvernhs.co.uk/forum/	38	02/03/2015, 12:24 Uhr
Taynton Metal Detecting Club	http://www.glevumdetecting.co.uk/phpBB3/index.php	28	02/03/2015, 12:09 Uhr

Table 1: British metal detecting boards with number of registered members at census date.

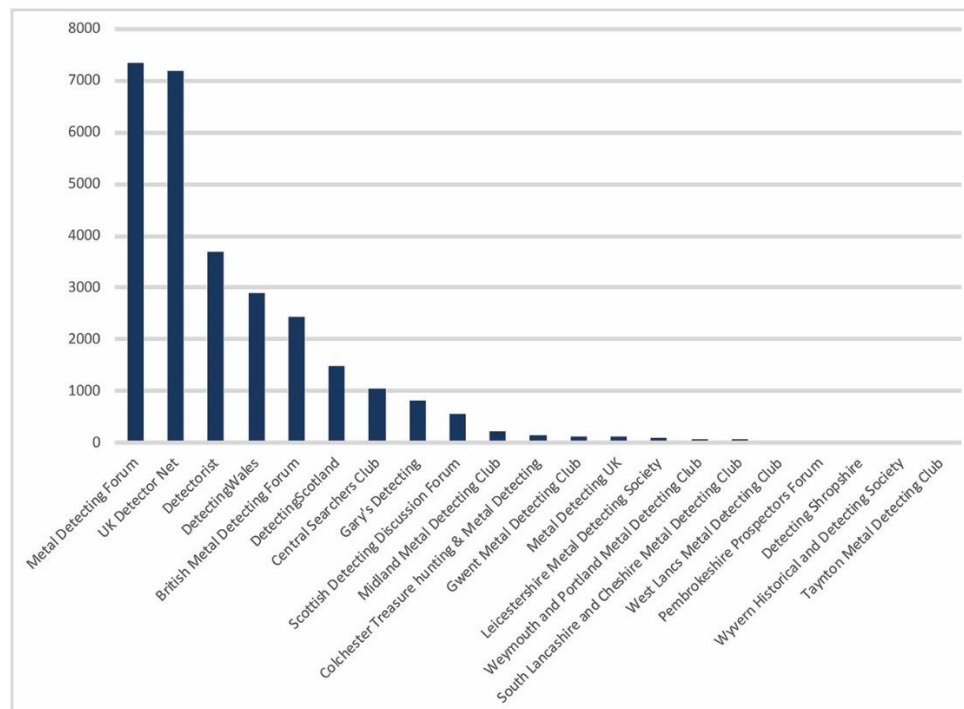


Figure 2: Absolute membership numbers of British metal detecting boards on 2/3/2015.

These numbers show that there are two boards with about 7,000 members each, with all others considerably smaller than these two. There are 5 more with over a 1,000 members, two more with between 500-800, while from the 10th board onwards, membership numbers become negligible (these are boards of local metal detectorist clubs with hardly more than, and mostly even considerably less than a hundred members). The membership figures for the largest UK metal detecting boards thus is roughly in the same range as the numbers that the PAS mentions in 2008 for the number of metal detectorist members of metal detecting clubs known to it, that is, c. 7,000-7,500 people (PAS 2008, 14). This implies that while the PAS may not know all metal detectorists in England and Wales – even if one assumes considerable overlaps in the membership of the two largest boards and between those and the memberships of the metal detecting clubs known to the PAS, as one has to – it does know a significant percentage of them, quite possibly considerably more than half of all active metal detectorists in England and Wales.

Germany and Austria

In Germany and Austria, we were able to identify 13 metal detecting boards, i.e. considerably fewer than in the UK, of which 11 are German, and 2 Austrian. All of them but one (the largest one) displayed their membership figure on their front page, with the largest German board displaying a misleading figure of c. 190,000 members in the place where all others list the number of the registered users. We corrected this particular outlier in the data by signing up to and examining the actual list of registered members of this board, which is considerably lower than 190,000, but still stands at c. 30,000. To exclude any possibility for error, this figure was then double-checked with the administrator of this board, who confirmed that the lower figure of c. 30,000 was, indeed, accurate. Table 2 provides a list of these boards in descending order of membership size, with their URL given in the second column, their country of origin in the third, the number of registered members in the fourth and the date and time their membership number was recorded in the fifth column.

Forum	Forum	Land	Mitgliederzahl	abgerufen
Schatzsucher	http://www.schatzsucher.de/Foren/	Deutschland	29818	02/03/2015, 13:33 Uhr
Bodenfundforum	http://www.bodenfundforum.com/index.php?/index	Deutschland	10292	02/03/2015, 13:27 Uhr
Detektorforum	http://www.detektorforum.de/	Deutschland	10011	02/03/2015, 13:19 Uhr
Sucherforum	http://www.sucherforum.de/smf/index.php	Deutschland	7857	02/03/2015, 13:36 Uhr
Schatzsucher	http://www.schatzsucher.org/forum/	Deutschland	7167	02/03/2015, 13:22 Uhr
Ferrum Noricum	http://www.sondengaenger.at/xf/	Österreich	2238	02/03/2015, 13:34 Uhr
Terra Pannonia	http://www.terra-pannonia.at/forum/forum.php?s=a1ec2021aff1351475b318a69ada068c	Österreich	897	02/03/2015, 13:24 Uhr
Digs	http://www.digs-online.de/forum/index.php	Deutschland	669	02/03/2015, 14:13 Uhr
Sondler	http://www.sondler.net/forum/	Deutschland	647	02/03/2015, 14:04 Uhr
Eifelsucher	http://forum.eifelsucher.de/index.php?sid=41f75f167a1279f0b7b477ea1b5f0b07	Deutschland	333	02/03/2015, 13:45 Uhr
Strandsucherforum	http://www.strandsucherforum.de/	Deutschland	207	02/03/2015, 13:58 Uhr
Gutfund	gutfund.de/index.php/BoardList/	Deutschland	190	02/03/2015, 14:01 Uhr
Metalldetektorforum	http://www.metalldetektorforum.ch/forum/	Schweiz	127	02/03/2015, 13:59 Uhr
Serva Historia	http://www.servahistoria.de/forum/	Deutschland	38	02/03/2015, 13:33 Uhr

Table 2: German language metal detecting boards with number of registered members at census date.

While there are fewer metal detecting boards in the German language area than in the UK, particularly the German boards seem to have considerably more members than their British equivalents. As already mentioned, the largest German board, <http://www.schatzsucher.de/foren/>, has almost 30,000 registered members, more than 4 times the membership number of the largest British one. Another three German boards, two with c. 10,000, and another one with nearly 8,000 members, are also larger than, and another one with c. 7,000 members is almost the same size as the two largest British boards. Only then, there is a large drop to the board with the next largest membership, the largest Austrian one, with about 2,250 members. Then there are another three, the second largest

Austrian and two further German boards, with over 500 members each, while from the 10th forum onwards, numbers drop below the 500 mark to negligible numbers, much like with the British ones.

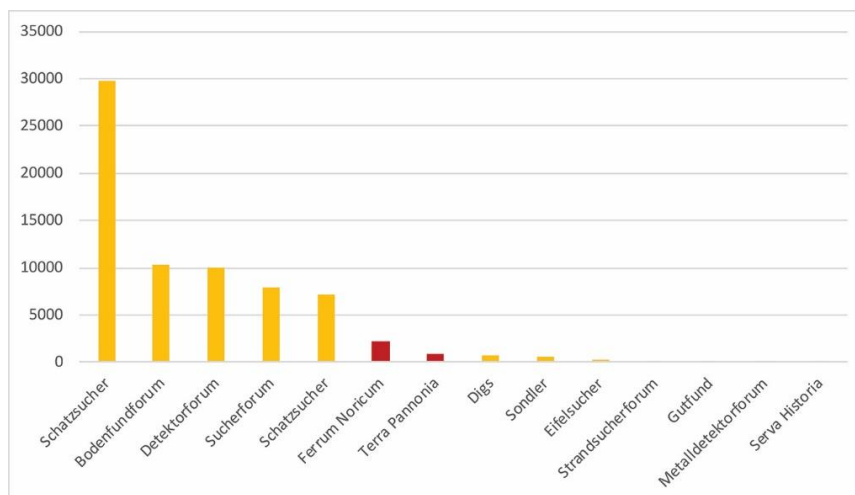


Figure 3: Absolute membership of German-language metal detecting boards on 2/3/2015 (yellow = Germany, red = Austria).

What is plainly evident is that the number of people registered on German metal detecting boards massively exceeds the number of volunteer archaeologists and metal detectorists with a permit, by a factor of at least 10, if one only considers the membership of the largest German metal detecting board. This implies that most German state heritage agencies do not know (of) the vast majority of the metal detectorists operating in their respective jurisdiction; at best 1 in 10, if not considerably fewer – that is, if one assumes that not all German metal detectorists are members of the largest German metal detecting board, and that there may indeed be some, if not many, that are members in no such boards at all. After all, archaeological metal detecting without a permit is deemed to be illegal pretty much everywhere in Germany, and even if using a more or less cryptic screen name, IP-addresses can be traced by the police. Signing up to such a board, thus, is almost an admission of breaking the law. German heritage agencies thus, quite in contrast to the British PAS, at best see the top of the iceberg, if not just part of that top.

Comparison of absolute and per capita numbers

There obviously are considerable differences in the numbers of members of metal detecting boards between Germany and the UK, two countries with roughly comparable population sizes (Germany c. 80 Million, UK c. 64 Million). How massive that difference is in absolute numbers is best illustrated by comparing the membership numbers of the largest German metal detecting board with the sum of the membership of all British metal detecting boards we were able to identify in our survey (fig. 4). Quite shockingly, in such a comparison, the largest German detectorist board, with 29,818 members, turns out to still be larger than all 21 British metal detecting board memberships combined, which adds up to ‘only’ 28,537 members. Of course, this is not corrected per capita, but absolute numbers, but still shows how significant the difference is.

If one compares the top 10 boards in the UK and the German language area per capita, this difference also becomes very apparent. Figure 5 shows the number of registered members of each of these boards per 1 million members of the population of the respective country they hail from. Even when corrected per capita, there are 3 German and the largest Austrian boards which have – partly considerably – larger memberships than the top 2 British boards, with the next three thereafter again being an Austrian, and two German boards. Only then, a relatively long tail of somewhat smaller British boards starts.

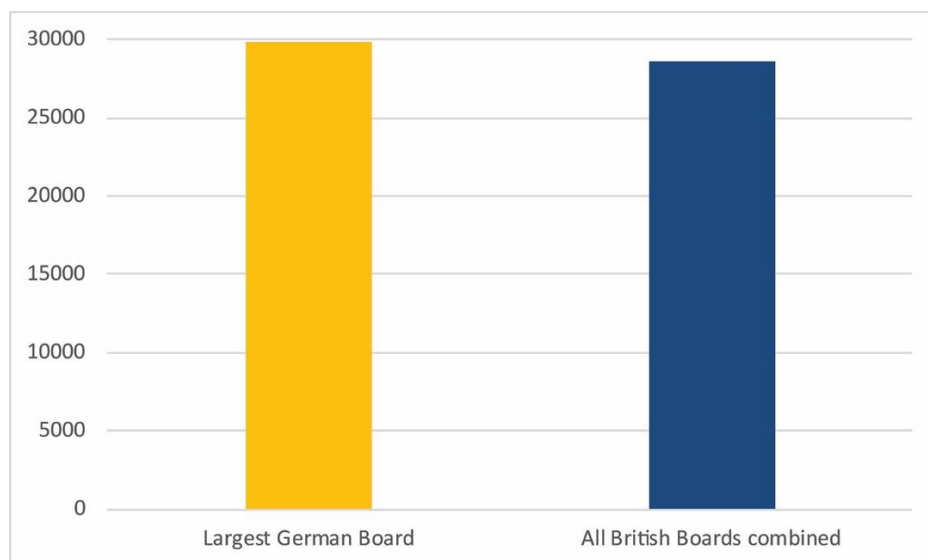


Figure 4: Comparison of absolute membership numbers of the largest German metal detecting board with the sum of the membership of all 21 British metal detecting boards identified in this survey.

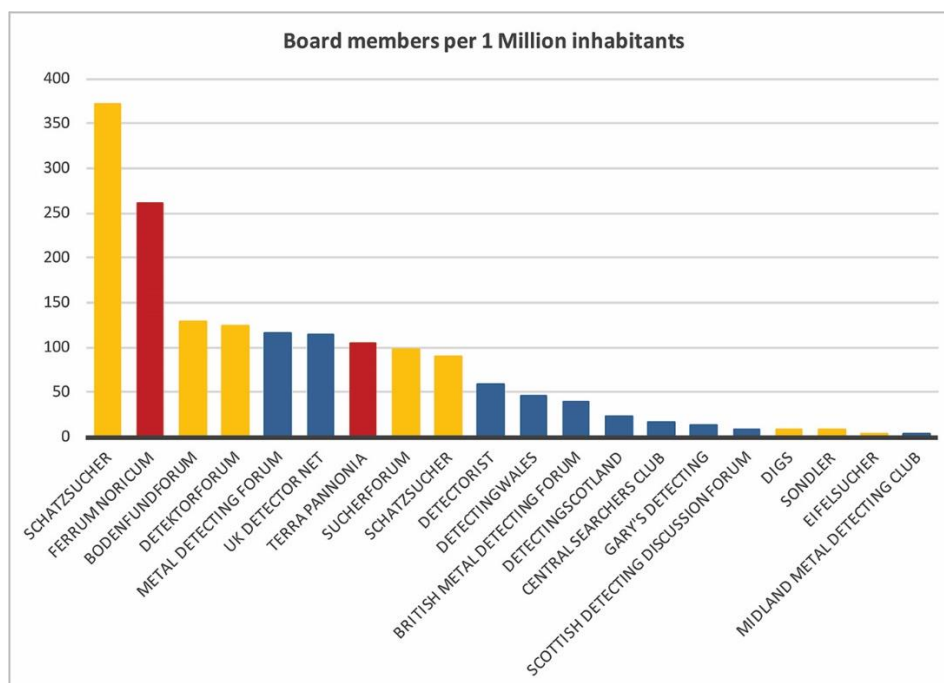


Figure 5: Number of members of Austrian (red), German (yellow) and UK (blue) metal detecting boards per 1 million inhabitants of their respective countries.

Even if one adds up the per capita numbers of the national boards – which is unlikely to be a reliable way of estimating total numbers of metal detectorists, since a high percentage of overlap between the different board memberships has to be assumed – Germany still comes out a distant first with almost double the members of such boards per capita, with even Austria – with just two boards – only registering slightly behind the UK in per capita board membership if one compares the total per capita membership of the two Austrian boards with the top 10 British boards. If one takes only the top 4 British boards to get a comparative figure to Austria, Austria comes out ahead of Britain already; if one compares just the top 2, then with a more than 50% margin.

However, it is probably best to compare just the membership numbers for the largest board in each country to get a reasonably reliable comparison of the relative sizes of their metal detecting

communities. While this may slightly underrepresent the size of the British metal detecting community, which doesn't seem to have just one 'most popular' metal detecting board, but in fact two that are roughly equally popular, just considering the largest board in each country still seems most appropriate, since it avoids counting metal detectorists who have signed up to multiple boards several times. There is clear evidence that such overlaps in memberships between boards – even if certainly not to a 100% – are definitely common, so the risk of double-, treble- of even more frequently counting the same individuals increases the more additional board memberships are added to any such count.

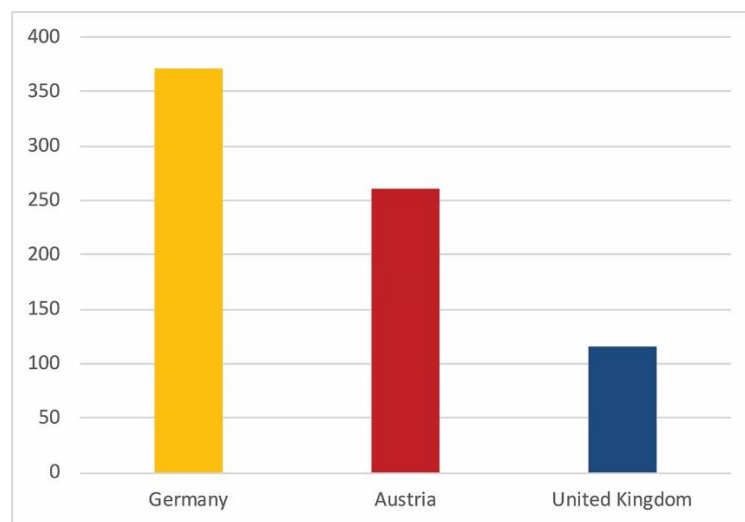


Figure 6: Number of members of the largest metal detectorist boards of each country per 1 Million inhabitants.

If one compares the per capita membership of the largest national metal detecting boards each (fig. 6), the per capita number of Austrian metal detectorists appears to be about 2.25 and that of German metal detectorists about 3.5 times that of the British metal detectorists. Even if one were to compensate these figures for the fact that the British metal detectorists have two 'top' boards of roughly the same size, by adding about 1/3rd to the per capita figure for the largest British board, the Austrian metal detecting community would still appear to be only slightly less than twice and the German almost thrice the size of the British one.

Deterrence hypothesis testing: conclusions

Where the testing of the hypothesis of a deterrent effect of restrictive regulation of metal detecting is concerned, these figures are quite decisive: they flatly contradict the prognosis derived from the hypothesis of the deterrent effect.

Germany, which has taken the most restrictive approach on metal detecting, does not have the smallest per capita number of metal detectorists of the three countries compared in this study, nor does Britain, the country with the most liberal approach, have the largest. Their respective numbers don't even add up to an even score, unless one compares the membership of – exclusively – the largest German board with the sum total of the memberships of all metal detecting boards in the UK. But that, naturally, would be an entirely flawed comparison unless one assumes that all German metal detectorists are members of the largest German board, while all the memberships of all UK metal detecting boards are absolutely mutually exclusive.

If however, as one must, one compares like data with like, Germany has by far the largest per capita number of metal detectorists of the three countries compared, despite being the most restrictive in

its approach to 'the problem', while Britain in any such like with like-comparison seems to have the fewest, and that by a sizeable margin.

To salvage the hypothesis of the deterrent effect, one would have to assume quite ridiculous things, like that Germans and Austrians naturally predisposed to become habitual criminals and blatantly disregard the law, and thus engage in an activity prohibited in their countries much more than Brits engage in this activity, despite it being mostly legal in the UK. Or one would have to assume that for some unknown reason, the percentage of all British metal detectorists who use hobby-specific internet boards is considerably less than 1/3rd of the percentage of all German metal detectorists who do so; despite the fact that metal detecting is mostly legal in Britain, with very little risk involved with joining a UK metal detecting board, while it is mostly illegal in Germany and Austria and thus joining one with a traceable IP-address exposes everyone who does to at least some risk of prosecution. And not just that, any such 'other' unknown factors would have to have massive effects, in excess of a multiplier or divider of the board membership uptake percentage of 3 or greater, to be able to account for the membership figures we could observe.

Yet, all this is exceedingly unlikely: there is no reason to believe that British metal detectorists have entirely different habits of online board use than German or Austrian ones; nor is there any independent evidence which seems to support this. Thus, if one accepts that the number of members of 'national' metal detecting boards is reasonably representative of the number of metal detectorists in a given country, the results of our study can be accepted as sound and conclusive.

Thus, **the hypothesis that a restrictive approach to metal detecting (significantly) reduces the number of metal detectorists** in a country, and thus (also significantly) reduces the damage done by metal detectorists to archaeology still in situ, **must be considered to have been falsified** by the results of this study. Whatever the deterrent effect of a restrictive approach to metal detecting may be, it most probably isn't very substantial (if it exists at all), and of much lesser significance than that of other factors on the frequency of metal detecting in any country.

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